Q.P. Code: 20AP102 | **SET - 1**

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA

B. Tech. I Semester (R20) Regular Examinations of July – 2021

Sub: Applied Physics (EEE & ECE)

Time: 3 Hours **Max. Marks: 60**

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

UNIT - I

1.	(a)	Discuss single Slit diffraction to obtain amplitude, intensity and phase of diffracted waves.	**8M**
	(b)	Distinguish between Fresenels and Fraunhoffer diffraction.	**4M**
		(OR)	
2.	(a)	Explain Newtons Experiment to obtain wavelength of the given monochromatic waves.	**8M**
	(b)	When are the two light souces to be coherent.	**4M**
		UNIT – II	
3.	(a)	Explain the principle ,constuction and working of Nd:YAG laser withneat diagram.	**8M**
	(b)	What is population inversion in lasers.	**4M**
		(OR)	
4.	(a)	Classify different types of Optical Fibers and write its applications	**5M**
	(b)	Discussfiber optic communication system with neat diagram.	**7M**
		UNIT – III	
5.	(a)	Write the differences between soft and Hard magnetic material.	**7M**
	(b)	Describe the classification of magnetic materials based on their magnetic moment / spin.	**5M**
		(OR)	
6.	(a)	Derive Claussius Mossitti equation in dielectrics.	**7M**
	(b)	Discuss different types of Polarizations in Dielectrics.	**5M**
		UNIT – IV	
7.	(a)	Derive Schroedinger time independent wave equation .	**8M**
	(b)	Explain dual natureof matter and write properties of matter waves.	**4M**
		(OR)	
8.	(a)	Discuss the electrical conductivity in metals using classical free electron theory.	**8M**
	(b)	Explain Density of states.	**4M**
		UNIT-V	
9.	(a)	What are intrinsic and extrinsic semiconductors.	**4M**
	(b)	Obtain carrier concentration in intrinsic semiconductors.	**8M**
		(OR)	
10.	(a)	Explain Meissner ffect of Superconductivity .	**4M**
	(b)	Write the differences between type -I and Type - II superconductors.	**8M**

Q.P. Code: 20EC102 | **SET - 1**

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA

B. Tech. I Semester (R20) Regular Examinations of July – 2021

SUB: Engineering Chemistry (ME)

Time: 3 Hours **Max. Marks: 60**

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

UNIT - I

1.	(a)	Explain the softened of water by zeolite process with neat diagram	7M
	(b)	Write a short note on specifications for drinking water	5M
		(OR)	
2.	(a)	Describe the estimation of hardness by EDTA method	8M
	(b)	Define hardness and explain types of hardness	4M

UNIT – II

3.	(a)	Define electrode potential and explain derivation of Nernst equation	7M
	(b)	Explain Electro chemical cell with neat diagram	5M
		(OR)	
4.	(a)	Define corrosion and explain the mechanism of electro chemical corrosion .	8M
	(b)	Write a short note on galvanic corrosion	4M

UNIT – III

5.	(a)	Write a short note on mechanism of cationic addition polymerization	6M
	(b)	Differences between Thermo plastics and Thermosetting plastics	6M
		(OR)	
6.	(a)	Define octane number (or) octane value	2M
	(b)	What do you mean by refining of petroleum? List out the various fractions obtained during refining of crude oil with neat diagram	10M

UNIT – IV

7.	(a)	Define refractory and write the classification of refractories with examples	6M
	(b)	Setting and hardening of cement	6M
		(OR)	
8.	(a)	Define the lubricant and explain the functions of lubricants	6M
	(b)	i) Flash point ii) Fire point iii) Cloud point	6M

UNIT-V

9.	(a)	Explain the synthesis of colloids by Dispersion method.	6M
	(b)	Define nano materials and write the applications of nano materials	6M
		(OR)	
10.	(a)	Write a short note on micelle formation	5M
	(b)	Write notes on Stabilization of colloids by stabilizing agents	7M

Q.P. Code: 20EP102 | **SET - 1**

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA

B. Tech. I Semester (R20) Regular Examinations of July – 2021

SUB: Engineering Physics (CE)

Time: 3 Hours **Max. Marks: 60**

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

UNIT - I

1.	(a)	Determine the wavelength of light source by using Newton's rings experiment.	8M
	(b)	In a Newton's rings experiment, the diameter of the 8^{th} ring was 0.35 cm and the diameter of 18^{th} ring was 0.65 cm. If the wavelength of the light used is 6000Å then find the radius of curvature of the plano convex lens?	4M
		(OR)	
2.	(a)	Explain Fraunhofer diffraction due to a single slit.	10M
	(b)	What is diffraction grating?	2M

UNIT – II

3.	(a)	Explain the characteristics of lasers?	4M
	(b)	Explain the construction and working of Nd:YAG laser.	8M
		(OR)	
4.	(a)	Explain the principle of optical fiber?	4M
	(b)	Explain the classification of optical fibers based on refractive index profile	8M

UNIT – III

5.	(a)	Explain Dia, Para and Ferro magnetic materials?	10M
	(b)	Define Hysteresis	2M
		(OR)	
6.	(a)	What are Nanomaterials? and Explain the electrical and magnetic properties of Nanomaterials.	6M
	(b)	Explain various applications of Nanomaterials?	6M

UNIT – IV

7.	(a)	Define Reverberation and Reverberation time.	4M
	(b)	Derive sabine's formula.	8M
		(OR)	
8.	(a)	What are Ultrasonics and write their properties.	4M
	(b)	Explain the production of ultrasonics by Piezoelectric method?	8M

UNIT-V

9.	(a)	Define unit cell and lattice parameters.	4M
	(b)	Explain the packing fraction of SC,BCC and FCC structures	8M
		(OR)	
10.	(a)	Explain Bragg's law	4M
	(b)	Explain Bragg's X-ray diffractometer	8M

Q.P. Code: 2002104 | **SET - 1**

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA

B. Tech. I Semester (R20) Regular Examinations of July – 2021

SUB: Fundamentals of Electrical Engineering (ECE)

Time: 3 Hours **Max. Marks: 60**

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

UNIT - I

1. (a) State and explain Lenz's law. 6M
   (b) For the series connected Resistance (R1, R2 and R3) determine its Equivalent value. 6M

(OR)

2. (a) State and explain Fleming's right-hand rule. 6M
   (b) A current of 5A flowing through a coil of 500 turns produces a flux of 20mWb. Find the co-efficient of self-induction and the inductive reactance of the coil at 50Hz. frequency. 6M

UNIT – II

3. (a) Briefly explain the following terms related to Ac supply Systems 4M
   (i) RMS Value
   (ii) Average Value
   (iii)Peak Factor
   (iv)Form Factor
   (b) Voltage across a coil is 146.2V and across series resistance is 150V, when they are connected across 220V, 50Hz supply. If supply current is 10 amp, find: i) Resistance of coil ii) Inductance of coil iii) Power consumed by coil iv) Power factor of total circuit 8M

(OR)

4. (a) Derive the relationship between line and phase values of voltage in balanced star connection using the phasor diagram. 6M
   (b) An AC circuit consist of two branches in parallel. Branch I: R = 10 Ω and L = 0.1 H in series Branch II: C = 50μF. If the circuit is supplied from 200V, 50Hz supply. Determine: (i) Branch impedances. (ii) Branch currents (iii) Circuit power factor (iv) Power consumed by the circuit. 6M

UNIT – III

5. (a) State the Norton's theorem. Also write stepwise procedure for applying Norton's theorem to simple circuits. 6M
   (b) Verify the reciprocity theorem for the network shown in the figure.1 6M

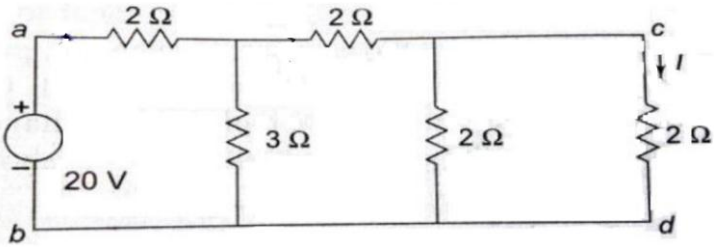


Fig.1

(OR)

6. (a) For the given circuit determine the value of the load resistance that receives the maximum power from the supply source and the maximum power under the maximum power transfer condition. 6M

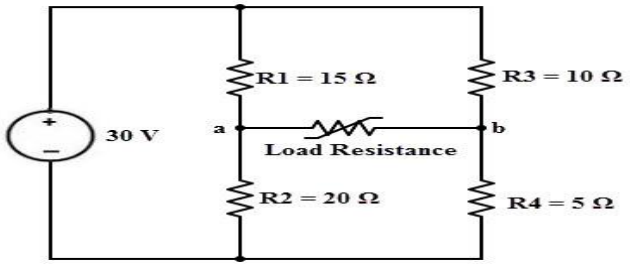


Fig .2

(b) Explain the principle of operation of a single-phase transformer and derive its EMF equation. 6M

UNIT – IV

7. (a) Explain the necessity of starters in DC motors. With a help of a neat diagram briefly explain the construction of three-point starter. 6M

(b) With basic Principles derive the Emf equation of DC Generator 6M

(OR)

8. (a) State the principle of operation of Dc Generator 4M

(b) An 8-pole lap wound armature having 40 slots with 12 conductors/ slot generates 500V. Determine speed at which machine is running if the flux per pole is 50 mWb. 8M

UNIT-V

9. (a) Briefly explain the working of three phase induction motor according to Revolving magnetic field theory 6M

(b) Discuss the method for evaluation of Voltage Regulation for the synchronous Alternator 6M

(OR)

10. (a) Describe with neat sketches the constructional details of a salient pole type alternator 6M

(b) Explain about the speed -torque characteristics of three phase induction motor 6M

Q.P. Code: 2003105 | **SET - 1**

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA

B. Tech. I Semester (R20) Regular Examinations of July – 2021

SUB: Engineering Drawing (CE, EEE & ECE)

Time: 3 Hours **Max. Marks: 60**

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

UNIT - I

1. Draw a straight line AB of any length. Mark a point F, 85 mm from AB. Trace the paths of a point P moving in such a way that the ratio of its distance from the point F, to its distance from AB is 3:2. Plot at least 10 points. Name the curve. Draw a tangent and normal to curve at a point on it, 65 mm from F. 12M

(OR)

2. A coir is unwound from a drum of 30mm diameter. Draw the locus of the free end of the coir for unwinding through an angle of 360^0. Draw also a normal and tangent at any point on the curve. 12M

UNIT – II

3. (a) (i) A point A is 30mm above the H.P. and 40mm in front of the V.P. Draw its Projections. 6M
   (ii) A point A is 25mm below the H.P. and 35mm behind the V.P. Draw its Projections.
   (b) Two points P and Q are in the H.P. The point P is 20mm in front of the V.P., while Q is behind the V.P. The distance between their projectors is 60mm and the line joining their top views makes an angle of 30^0 with xy. Find the distance of the point Q form the V.P. 6M

(OR)

4. (a) A cube of 40 mm long edges lies with one of its square faces on H.P. Such that one of its vertical faces is inclined at 40^0 to V.P. Draw its projections. 7M
   (b) Draw the projections of a pentagonal pyramid axis 50 mm long, base 40 mm side having base on the ground and one of edges of base inclined at 45^0 to V.P. 5M

UNIT – III

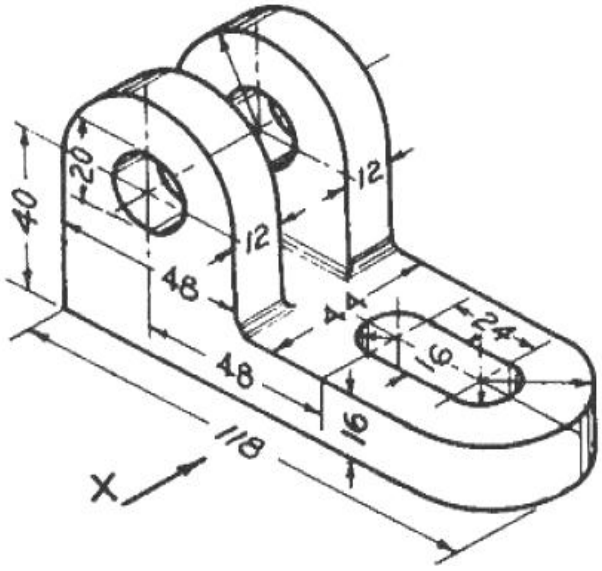
5. A hexagonal pyramid of base edge 20 mm and height 40 mm rests on one of the corners of the base in HP with its axis is inclined at 30^0 to HP and parallel to VP. A vertical section plane inclined at 30^0 to VP cuts the pyramid removing 15 mm length of the axis from apex. Draw the projections of the pyramid and find the true shape of the section. 12M

(OR)

6. A cylinder of diameter of base 60 mm, altitude 80 mm stands on its base. It is cut into two halves by a plane perpendicular to the VP and inclined at 30^0 to HP. Draw the development of the lower half. 12M

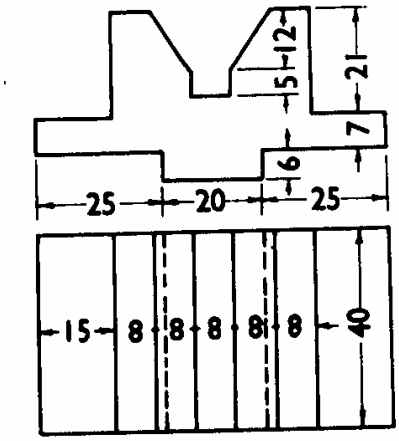
UNIT – IV

7. Draw the elevation, plan and side view for the following Figure 12M



(OR)

8. Draw the isometric view of the objects whose orthographic projections are given in Figure. All dimensions are in mm. 12M



UNIT-V

9. A square prism side of base 40mm and height 60mm rests with its base on the ground such that one of its rectangular faces is parallel to and 10mm behind the picture plane. The station point is 30mm in front of picture plane, 80mm above the ground plane and lies in a central plane 45mm to the right of the center of the prism. Draw the perspective projection of the square prism using visual ray method. 12M

(OR)

10. A square lamina of 40mm side lies on the ground plane. One of its corners is touching the picture plane and an edge is inclined at 60^0 to picture plane. The station point is 40mm infront of picture plane, 60mm above ground plane and lies in a central plane which is at a distance of 35mm to the right of the corner touching the picture plane. 12M

draw the perspective projection of the lamina using vanishing point method.

Q.P. Code: 2005103 **SET - 1**

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA

B. Tech. I Semester (R20) Regular Examinations of July – 2021

SUB: C-Programming & Data Structures (EEE, ME & CSE)

Time: 3 Hours **Max. Marks: 60**

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

UNIT - I

1.	(a)	Explain about various Jumping statements in 'c'.	6M
	(b)	Explain briefly about primitive data types with its sizes, range and format specifiers	6M
		(OR)	
2.	(a)	Explain in detail about decision statements in 'c'	8M
	(b)	Write a c program to check whether a number is palindrome or not	4M

UNIT – II

3.	(a)	Define Function. Explain about Library functions and user defined functions with suitable examples.	6M
	(b)	Write a c program to add two matrices.	6M
		(OR)	
4.	(a)	With suitable examples differentiate Dynamic Array and Static Array	7M
	(b)	Define Recursion. Write a c program to find factorial of a number using recursion.	5M

UNIT – III

5.	(a)	Differentiate between structure and union.	6M
	(b)	Explain in detail about Dynamic Memory Allocation	6M
		(OR)	
6.	(a)	Explain in detail about defining a structure, initializing it and accessing a structure with suitable examples.	6M
	(b)	Define Pointer. Write a c program to swap two numbers using pointers	6M

UNIT – IV

7.	(a)	Explain in detail about bubble sort with an example	6M
	(b)	Write a c program to demonstrate various stack operations	6M
		(OR)	
8.	(a)	Explain the evaluation of the following postfix expression using stacks with an example	6M
	(b)	Write a c program to implement queue using arrays	6M

UNIT-V

9.	(a)	Define the following (i) Binary Tree (ii) Complete Binary Tree (iii) Full Binary Tree	3M
	(b)	Write a c program to demonstrate insertion, deletion and display operations in a single linked list	9M

(OR)

10. (a) Define Binary Search Tree. Explain the insertion operation in BST for the following elements. 43, 10, 79, 90, 12, 54, 11, 9, 50 — 6M

(b) Explain briefly about various operations in Double linked list — 6M

Q.P. Code: 2014104 **SET - 1**

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA

B. Tech. I Semester (R20) Regular Examinations of July – 2021

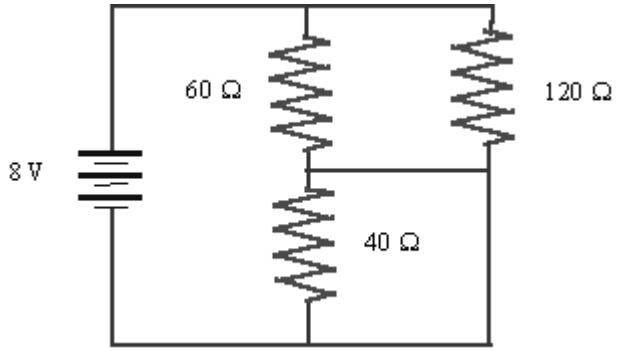
SUB: Basic Electrical and Electronics Engineering (CE, ME & CSE)

Time: 3 Hours **Max. Marks: 60**

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

UNIT - I

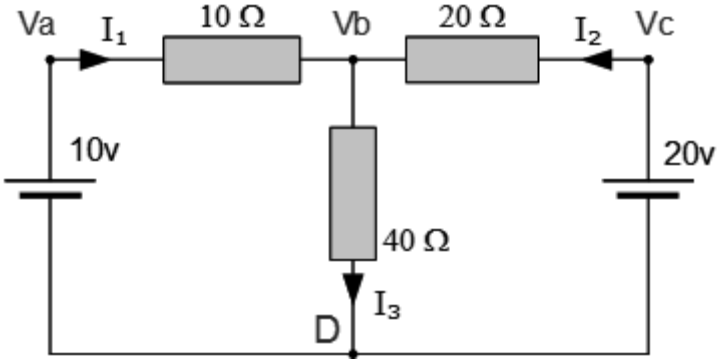
1. (a) Find the equivalent resistance of the circuit shown below. — 6M



(b) In a series R-L-C circuit, R = 5 Ω, XC = 10 Ω, XL = 12 Ω. A voltage V is applied across the combination such that the series current is 2 A and it lags the system voltage by 20^0.Assuming the system frequency to be 50Hz, find the voltage drops across each element. — 6M

(OR)

2. (a) Apply Kirchhoff's laws to find the currents I_1, I_2, and I_3 in the circuit drawn below. — 6M



(b) An alternating voltage is given by v(t) = 220 sin(314t) volts. Find — 6M
(i) Peak value (ii) R.M.S. value (iii) Frequency and (iv) Average value.

UNIT – II

3. (a) Draw the phasor diagram for the ideal transformer. Explain its operation with necessary diagrams. — 6M

(b) A 150 kVA, 2000V/200V, 50Hz single-phase transformer has 200 secondary turns. Determine (a) the primary and secondary current, (b) the number of primary turns. — 6M

(OR)

4.	(a)	Prove that the emf equation of dc machine is $Eg = (\Phi ZNP) / 60A$	6M
	(b)	Explain the armature and flux methods of speed control of DC motors with necessary diagrams.	6M

UNIT – III

5.	(a)	Explain with necessary diagrams how 3-phase power is generated.	6M
	(b)	What do you mean by AC and DC transmission? Explain its necessity.	6M

(OR)

6.	(a)	Explain the typical AC power supply with neat sketches.	6M
	(b)	Explain in brief about short and medium transmission lines.	6M

UNIT – IV

7.	(a)	Draw the Clipper half wave rectifier and full wave rectifier. And explain them with necessary equations in detail.	6M
	(b)	Can BJT be used for amplification of signal? If so explain along with biasing techniques.	6M

(OR)

8.	(a)	Explain the basic operation of Diode	6M
	(b)	What is Op-Amp? Explain differential amplifier configurations.	6M

UNIT-V

9.	(a)	Draw the block diagram of 741 Op-Amp. Explain it with neat sketches.	6M
	(b)	Explain the simple combinational circuits with neat sketches.	6M

(OR)

10.	(a)	What is a flip flop? Explain its significance in electronics with any one example?	6M
	(b)	Analyze the input and output characteristics of a Common-Emitter BJT configuration.	6M

Q.P. Code: 2021101 | **SET - 1**

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA

B. Tech. I Semester (R20) Regular Examinations of July – 2021

SUB: Linear Algebra and Calculus (Common to All branches)

Time: 3 Hours **Max. Marks: 60**

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

UNIT - I

1. (a) Reduce the following matrix into normal form and hence find its rank. 6M

$$A=\begin{bmatrix}2 & 3 & -1 & -1\\ 1 & -1 & -2 & -4\\ 3 & 1 & 3 & -2\\ 6 & 3 & 0 & -7\end{bmatrix}$$

(b) Verify Cayley-Hamilton theorem for the matrix $A=\begin{bmatrix}1 & 4\\ 2 & 3\end{bmatrix}$ and hence find its inverse. 6M

(OR)

2. Find the eigen values and eigen vectors of the matrix $A=\begin{bmatrix}3 & 1 & 4\\ 0 & 2 & 6\\ 0 & 0 & 5\end{bmatrix}$. 12M

UNIT – II

3. (a) Find c of Cauchy's mean-value theorem for $f(x)=\sqrt{x}$ and $g(x)=\frac{1}{\sqrt{x}}$ in $[a,b]$ where $0<a<b$. 6M

(b) Expand $f(x)=\sin x$ by Maclaurin's theorem with Lagrange's form of remainder. 6M

(OR)

4. Using Taylor's theorem, Prove that $x-\frac{x^3}{3!}<\sin x<x-\frac{x^3}{3!}+\frac{x^5}{5!}$ for $x>0$. 12M

UNIT – III

5. (a) Show that $x\frac{\partial u}{\partial x}+y\frac{\partial u}{\partial y}+z\frac{\partial u}{\partial z}=0$, if $u=f\left(\frac{x}{y},\frac{y}{z},\frac{z}{x}\right)$. 6M

(b) Using Lagrange's method of undetermined multipliers, find the maximum value of $x^m y^n z^p$ subject to the condition $x+y+z=a$. 6M

(OR)

6. (a) Determine $\frac{\partial(x,y,z)}{\partial(u,v,w)}$, when $x+y+z=u,\ y+z=uv,\ z=uvw.$ 6M

(b) Find the dimensions of the rectangular box requiring least material for its construction when the box is open at the top is to have a volume of 32 cubic feet. 6M

UNIT – IV

7. (a) Evaluate $\iint_R xy\,dx\,dy$ where R is the region bounded by the first quadrant of the circle $x^2+y^2=a^2$. 6M

(b) Evaluate $\int_0^2 \int_0^{\sqrt{4-x^2}} \int_0^8 2yz\,dz\,dy\,dx$ by changing into cylindrical polar coordinates. 6M

(OR)

8. (a) Evaluate $\int_0^\infty \int_0^\infty e^{-\left(x^2+y^2\right)}\,dx\,dy$ by changing into polar coordinates. 6M

(b) Evaluate $\int_{-1}^1 \int_0^z \int_{x-z}^{x+z} \left(x+y+z\right) dy\,dx\,dz$. 6M

UNIT-V

9. Show that $\beta(m,n)=\dfrac{\Gamma(m)\Gamma(n)}{\Gamma(m+n)}$. 12M

(OR)

10. (a) Show that $\int_0^{\pi/2} \sin^m\theta\cos^n\theta\,d\theta=\dfrac{1}{2}\beta\left(\dfrac{m+1}{2},\dfrac{n+1}{2}\right)$ where $m>-1,\ n>-1$. 6M

(b) Evaluate $\int_0^\infty e^{-ax}x^{n-1}\,dx$ where a,n are positive. 6M

Q.P. Code: 2023102 **SET - 1**

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA

B. Tech. I Semester (R20) Regular Examinations of July – 2021

SUB: Chemistry (CSE)

Time: 3 Hours **Max. Marks: 60**

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

UNIT - I

1.	(a)	Apply the Schrödinger wave equation to the electron present in the hydrogen atom.	10M
	(b)	What are the bonding and anti-bonding molecular orbitals?	2M
		(OR)	
2.	(a)	On the basis of molecular orbital theory, prove that the molecule of oxygen is paramagnetic in nature.	8M
	(b)	Write the significance of Ψ and Ψ^2.	4M

UNIT – II

3.	(a)	Write a brief note on salient features of crystal field theory.	6M
	(b)	Summarize the classifications of nanomaterials.	6M
		(OR)	
4.	(a)	Discuss the applications of nanomaterials today.	8M
	(b)	Discuss the magnetic properties of coordination compounds.	4M

UNIT – III

5.	(a)	Explain the construction and working of lithium ion batteries?	9M
	(b)	Define a reference electrode. Give examples.	3M
		(OR)	
6.	(a)	Discuss the conductometric titrations.	8M
	(b)	Give the differences between primary and secondary batteries.	4M

UNIT – IV

7.	(a)	Write the engineering applications of conducting polymers	6M
	(b)	Differentiate thermoplastic polymers and thermosetting polymers give suitable examples.	6M
		(OR)	
8.	(a)	Define the term ‘polymer’. Write the preparation, two properties and two engineering applications of Teflon and Bakelite.	10M
	(b)	Give two examples for conducting polymers.	2M

UNIT-V

9.	(a)	Explain the Basic principle and applications of IR Spectroscopy.	8M
	(b)	Write a note on the regions of electromagnetic radiation.	4M
		(OR)	
10.	(a)	Discuss the basic principle involved in Ultraviolet spectroscopy.	6M
	(b)	Summarize your understanding about TLC.	6M

Q.P. Code: 2024103 | **SET - 1**

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA

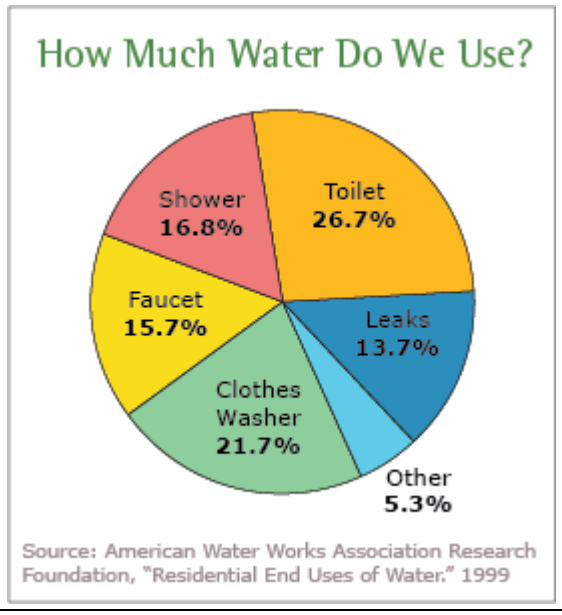
B. Tech. I Semester (R20) Regular Examinations of July – 2021

SUB: Communicative English (CE, EEE & ECE)

Time: 3 Hours **Max. Marks: 60**

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

UNIT - I			
1.	(a)	What is William Hazlitt son's attitude towards his new school as described in "On the Conduct of Life"?	7M
	(b)	Give the meaning of the idioms and phrases and use them in sentences of your own. i) Beat around the bush ii) Call it a day iii) On cloud nine iv) Find out v) Back up	5M
(OR)			
2.	(a)	What is word formation? Discuss various types of word formation?	7M
	(b)	i) Brett Lee bowls fast. (Rewrite the sentence by using adjective of 'fast') ii) You can complain in the office .. (Rewrite the sentence by using 'complain' as a Noun) iii) She works with care. (Rewrite the sentence by using Adverb of 'care')	3M
	(C)	i) **Give antonyms of the following.** a) Good b) Artificial ii) **Give synonyms of the following** a) bold b) Lazy	2M
UNIT – II			
3.	(a)	Appreciate the poem **The Brook** written by Alfred Lord Tennyson.	7M
	(b)	**Fill in the blanks with the right verb forms from the verbs given in brackets** (i) Tendulkar was _____ (bowl) for duck yesterday. (ii) Birds _____ (fly) in the sky. (iii)Look! The cashier_____ (give) money to the customer. (iv)He _____ (finish) his dinner just now. (v) My father ----------(go) for a walk daily.	5M
(OR)			
4.	(a)	**Make FOUR meaningful sentences on the following pattern.** Subject + Verb + Object + To infinitive They advised me to study well	4M
	(b)	**Fill in the blanks with 'A, An or The'** (i) Twelve inches make --- foot. (ii) The horse is .....noble animal. (iii)The chairman was .....first man to arrive.	3M
	(C)	**Fill in the blanks with suitable prepositions** (i) We prefer coffee_____ tea. (ii) Alcohol is injurious _____ health. (iii)He has a passion _____ arguing. (iv)The principal is satisfied _____your explanation. **(v)** My wife always quarrels ——— me.	5M
UNIT – III			

5.	(a)	How does Oliver Goldsmith bring out the sufferings of the poor in his essay, **'A City Night Piece?**	7M
	(b)	**Convert the following sentences as directed. 1X5 = 5M** (i) He asked Rama to go with him.(change into Direct Speech) (ii) ' Bring me a drink of milk' said the swami to the villagers.(change into Indirect Speech) (iii)My mother said to me, "Close the window."(change into Indirect Speech) (iv)John said that he wanted to be a soldier. (change into Direct Speech) (v) The boy said, "Alas! My sister failed in the test."(change into Indirect Speech)	5M
		(OR)	
6.	(a)	**Convert the following sentences as directed.** (i) Vivian Richards scored twelve double centuries.(change into Passive Voice) (ii) Our principal was vaccinated by the nurse. (change into Active Voice) (iii)They will postpone the meeting. (change into Passive Voice) (iv)Who taught you English? (change into Passive Voice) (v) Let the door be opened. (change into Active Voice) (vi)The thief was caught. (change into Active Voice)	6M
	(b)	**Convert the following sentences as directed.** (i) Rohit Sharma is the best batsman.(change into Positive Degree) (ii) Apple is as sweet as mango. (change into Comparative Degree) (iii)No other river in the world is as long as Nile.(change into Superlative Degree) (iv)Very few colleges in India are as old as Layola.(change into Superlative Degree) (v) Rustom is not the laziest boy in the class.(change into Positive Degree) (vi)This boy is the strongest in the class. (change into Comparative Degree)	6M
		UNIT – IV	
7.	(a)	What did you understand in Chetan Bhagath's essay **'Being rich, Being good'**?	7M
	(b)	Covert the following Pie chart texting it verbally.  	5M
		(OR)	
8.	(a)	**Convert the following sentences as directed.** (i) As she won the gold medal, she cried with joy. (convert into Simple Sentence) (ii) He is too old to run the marathon. (convert into Complex Sentence) (iii)Although they lost the match, they were not disgraced. (convert into Compound (iv)sentence) (v) You must take rich diet, or you will not gain weight. (convert into Simple Sentence)	6M

		(vi)Because of his illness, he could not play the match . (convert into Compound (vii) Sentence) f) I saw a wounded soldier. (Convert into Complex Sentence)	
	(b)	**Add question tags to the following statements.** (i) He answered my question. _____? (ii) Let us go to college. _____? (iii)I am a tennis player._____? (iv)The police will help you. _____? (v) We cannot do this together. _____? (vi) We seldom see the tigers. _____?	6M
		UNIT-V	
9.	(a)	**Why is George Orwell's essay "Politics and the English Language" significant?**	7M
	(b)	**Read the passage given below and answer the questions that follow:** One of the most remarkable facts about water is that it carries silt to far-off places where it is finally deposited .The land where silt is deposited is usually very fertile.The silt that mixes with the salt water of the sea precipitates rapidly.The colour of the water changes successively from the muddy red or brown to yellow and green and finally to the blue of the deep sea. These varying shades are also fascinating. The flow of water has undoubtedly played a great part in geological processes. Rapidly flowing water carries away the rich top layer of the soil.This phenomenon is called soil erosion. The problem of soil erosion is of major significance in various countries especially in India.Soil erosion in the initial stage is unnoticed. Later,it results in the formation of deep gullies,ravines and ruts.These things affect agriculture.The terracing of the land,the construction of bunds to check the flow of water,the practice of contour cultivation and the planting of some types of vegetation are the measures that can be used to check soil erosion. . **Questions:** (i) What is the primary color of water before it joins sea? (ii) What is the work done by the flowing water? (iii)Explain soil erosion'. (iv)How can soil erosion be checked? (v) Pick out the word from the passage which means 'producing'?	5M
		(OR)	
10.	(a)	**Correct the following sentences.** (i) He is one of my best friend. (ii) The price of apples are high. (iii)You have much dresses. (iv)Rani speaks loudly than her brother. (v) Tagore is one of the few Indians who has won the Nobel Prize. (vi) I thanked him for what he did. (vii) Ramesh worked hard and he failed in the examination.	7M
	(b)	Prepare a dialogue between principal and mischievous student,	5M